ARCHEOLOGICAL DATA UNCOVERED DURING THE EXCAVATION OF THE ELECTRICAL LINE AND PORCH TRENCHES IN PREPARATION FOR RECONSTRUCTION OF THE EAST AND WEST BARRACKS FORT FREDERICK STATE PARK, MARYLAND (18WA20)

PREPARED BY
Stephen Israel, M.A.

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ABSTRACT

Trenching for the electrical line at Fort Frederick revealed evidence of masonry building rubble outside the Fort to the west of the curtain wall. Inside the Fort, a 20th Century red gravelly clay fill was found overlying a brown humus occupational lens. An abrupt end of the above brown humus occupational lens, 82 feet east of the curtain wall, remains unexplained. Excepting a rectangular lens located east of the brown humus occupational lens, all the intrusive features found were by their nature associated with 20th Century activity at Fort Frederick.

No new fortification features were found near the west curtain wall during the excavations of the electrical line trench. However, the absence of 18th Century Fort construction is not conclusive, since the evidence is from the 1975 narrow and shallow construction trenches. Further exploration using archeological field techniques is recommended to confirm and verify the tentative conclusion reached from examining the narrow and shallow construction trenches.

The destruction of the 10 foot long brick feature west of the east barrack during the reconstruction has a lesson to be learned for future historic-site-restoration projects: either complete the excavation first or contractor must protect the ground.

ACKNOWLEDGEMENTS

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INTRODUCTION

Under the auspices of the Maryland Department of Natural Resources, including the Maryland Park Service, Capital Programs, and the Maryland Geological Survey, the State of Maryland has funded the reconstruction of the east and west barracks at Fort Frederick State Park. Arrangements were made with the building contractor, Floyd L. Culler, Inc., of Frederick, Maryland, to have an archeologist on the site to observe, record, and recover all significant archeological and architectural data encountered during the excavation of the footer trenches for the reconstructed barracks, installation of underground utilities, and the restoration of the 1756 ground grade around the west barrack.

Phase I, excavation of the footer trenches for the barracks, was completed in March 1975 (Israel 1975b) and Phase II, excavation of the electrical line and porch footer trenches, was completed in August 1975. This report concerns Phase II.

The photographs taken at Fort Frederick during the August 1975 excavation are on file in the Maryland Geological Survey, Division of Archeology.

PROCEDURES AND RESULTS

The excavation of the electrical line and east and west barrack porch footer trenches was undertaken August 12 and 13, 1975. The electrical line trench was mechanically dug with a Ditch Witch (model R 40) using an 8 inch wide trencher. An attached 8 inch wide front end bucket was used to remove numerous large granite stones found in two locales outside the Fort (see Figure 3). The length of the electrical line trench was 300 feet, of which 200 feet extended across the interior of the Fort (see Figure 2).

On account of the narrowness of the trench only sketches were made of the trench profile utilizing metal tapes and topographical data from Kish 1974 (Restoration and Development Drawings: see Figures 3 and 4). Another complication was that the Ditch Witch left a thin film of soil upon the trench walls obscuring the stratigraphic detail; thus it was necessary to trowel the trench wall for lens clarity.

On the second and final day, two 114 foot long and 6 foot wide porch trenches were mechanically dug with a Case 850 Backhoe on the parade ground side of the east and west barrack (see Figure 2).

Outside the Fort

A 100 foot long trench was mechanically dug from the west curtain wall out toward the Park parking lot (see Figure 1). The 8 inch wide trench was dug to a depth of 30 to 36 inches. The location of the trench begins 20 feet south of the NW bastion and curtain wall juncture and ends at a point 122 1/2 feet southwest from the northwest apex of the NW bastion.

The first 3 feet abutting the curtain wall was dug in March 1975, in order to install a gray plastic pipe for the temporary electrical line which ran beneath the west curtain wall, 32 inches below the surface grade. Also, abutting the curtain wall is a 32 inch deep and 36 inch wide trench where a 2 inch diameter iron water pipe runs parallel to the curtain wall 30 inches below ground grade.

Next to the Fort curtain wall the topsoil varies from 9 to 14 inches in thickness and thins to a 6 inch thickness from 40 feet out to the 100 foot mark. Subsequent settling of the 1930s CCC pipe-trench fill lowered a thin black humus topsoil lens apparently deposited here in the 1930s. West of this thin black humus lens, 8 feet from the curtain wall, the brown topsoil lies directly on the beige-tan subsoil below.

Two distinct but loose granite rubble lenses, 6 inches thick, were found 12 to 18 inches below the ground grade. These rock rubble lenses are located from 10 to 39 feet and

67 and 71 feet west of the curtain wall (see Figure 3). An orange color stain streaked across the trench north profile below the rock rubble and the thin black humus lens.

A second 2 inch diameter iron water pipe was uncovered 73 1/2 feet west of the curtain wall and buried 23 inches deep in a 1 foot wide trench (see Figure 3).

A loose and disturbed lens or pocket was found on the north face 52 to 55 feet west of the wall. This loose tan sandy fill soil did not appear on the south face of the trench. Artifacts from this lens included: 1 heavy and flat iron mid-section (plow blade?), 1 twisted iron rod (20th Century?), 2 iron fragments (iron rods?), 1 clear glass sherd, and 1 bone fragment.

Ninety-eight feet out from the curtain wall a twisted iron rod was found, broken in two by the Ditch Witch and buried 20 inches deep (see Figure 3). The iron rod lay on the bottom of a 20 inch deep trench. The western side of the intrusive 20th Century trench was not delineated.

Inside the Fort

A 200 foot long curved trench (curved in order to go around the Officers' Quarters) was mechanically dug. The electrical line trench passes 7 feet to the north of the west barrack, passing to within 3 feet of the Officers' Quarters central bay, and abuts the east barrack 3 feet south of the northwest corner (see Figures 1 and 2). Similar to the outside electrical line trench, the interior Fort trench was 8 inches wide and between 30 and 36 inches deep. This narrow trench passed through the 1974 Backhoe Trench A-7 (Israel 1975a: Figure 1).

No artifacts or new Fort features were found in the trench nor in the loose backfill brought up by the Ditch Witch. However, a distinct change in the color of the soil occurs between 80 and 84 feet east of the west curtain wall. At this locale the brown humus occupational and red clay fill lenses thin out and terminate (see Figure 4). East of this point, the loose backfill on the ground surface is a light beige-tan reflecting the color of the subsoil clay found immediately below the 8 inch thick topsoil.

A 6 foot deep trench was mechanically dug in March 1975, abutting the curtain wall, in order to install a gray plastic pipe for a temporary electrical line (see page 3). The bottom 2 feet of this trench contained a mottled brown humus fill. No builder's trench was discerned abutting the

west curtain wall. Might the mottled brown humus lens be the backfill of the 1930s CCC curtain wall exploratory trenches?

Abutting the west curtain wall above the mottled brown humus lens is a thick red gravelly clay lens. The lens is 40 inches deep and extends 4 feet below the ground surface next to the curtain wall. It slopes up to the east so that at 4 feet east of the wall it is 20 inches thick and 27 inches deep below today's ground surface grade. This red clay lens extends 53 feet to the east, thinning out east of the 1974 Backhoe Trench A-7 to a 17 inch thickness. A brown humus occupational lens appears 25 feet east of the curtain wall below the thinning red clay fill lens and it extends eastward 52 feet where it ends. Abutting the edge of this brown humus lens is a 30 inch long and 12 inch deep rectangular-like lens. This latter lens was not investigated, although its composition was mottled and similar to the brown humus fill in the adjacent lens described above.

The beige-tan subsoil clay is first observed at the base of the electrical line trench, east of the west barrack, and remains at the base of the trench to where the overlying brown humus occupational lens thins out 75 feet east of the barrack. At this location the beige-tan subsoil clay thickens. From here to the east barrack, an 8 inch thick black topsoil displays a distinct contrast with the beige-tan

subsoil clay immediately below.

Two narrow 1 foot wide and 1 1/2 foot deep lenses appear on the north profile wall one at 91-92 feet and another at 182-183 feet east of the west curtain wall (see Figure 4, and Schindel 1934: 2, and Israel 1975b: 9). These narrow trenches were marked by mottled beige-tan clay fill. On the south profile, abutting the east barrack, a 9 1/2 foot long mottled fill 16 inches thick was exposed. The latter was the fill of the 1974 Backhoe Trench B-8.

East and West Barrack Porch Trenches

It took two hours to dig a 114 foot long by 6 foot wide trench on the parade ground side of the west barrack. The southern tip of the porch area was not excavated, for the stairway foundation was to be erected on the present ground level. The porch trench was dug 18 to 20 inches deep with a Case 850 Backhoe and was later leveled out with a New Holland L-35 light lifter bucket. The 18 to 20 inch deep trench exposed the red clay fill and the brown humus occupational lenses. The beige-tan subsoil clay below was not exposed. Beyond looking for Fort features and the stratigraphic picture, no attempt was made to draw the 114 foot long vertical but irregular profile. No narrow intrusive trenches attributable to the CCC were recognized in the 114 foot long profile (see Schindel 1934: 2).

The thick red gravelly clay fill exposed in the 1974 west barrack excavation thins out and terminates 26 feet south of the barrack's north wall (Israel 1975a: 30 and 1975b: 9). At this point a 1 foot thick mottled brown humus occupational lens starts and extends northward. This same brown humus lens is also exposed in the narrow electrical line trench where it curves south of the Officers' Quarters and extends 41 feet east of the west barrack to the 80 to 82 foot mark (see Figure 4).

No new Fort features were found. The scattered artifacts found in the loose backfill include: 1 wine bottle base

sherd, 1 plain delftware bodysherd, and 1 brown earthenware bodysherd. Three whole bricks were found in the loose backfill in the vicinity of the diamond/octagonal brick feature (Reed 1934, Kimmel 1973: 44, and Israel 1975b: 10 and Figure 4).

The east barrack porch trench was also dug 114 feet long by 6 feet wide and dug to a depth of 16 inches. The east barrack porch trench extends through an 8 inch black topsoil lens and 8 to 10 inches into the beige-tan subsoil clay below. No new features were found. Artifacts found in the loose backfill include: 1 black earthenware bodysherd and 1 cobalt decorated gray stoneware bodysherd.

Destroyed was the 10 foot long feature, of two abreast bricks, found immediately below the ground surface 6 feet west of the east barrack (Reed 1934 and Israel 1975a: 8). The current construction project has disturbed and tossed the ground around in the locale of this brick feature. Also, no narrow CCC trenches were observed.

Several 20th Century archeological exploratory trenches were re-exposed in the east barrack porch trench, including Bastian's 1971 and Israel's 1975 (Backhoe Trenches B-8, 9, 10, and 11) and the 1975 electrical line trench (see Figure 2; and Bastian 1971 and Israel 1975a: Figure 1). As in the case of the west barrack porch trench, no attempt was made to draw the 114 foot long profile, beyond checking for Fort and stratigraphic features.

SUMMARY

This report is a summary of the archeological findings resulting from the electrical line trench excavations for the reconstruction of the east and west barracks at Fort Frederick State Park. These excavations were executed August 12 and 13, 1975.

No new fortification features were exposed in the electrical line trench excavation. Two concentrations of loose granite rock were uncovered 10 to 39 feet and 67 to 71 feet west of the curtain wall (see Figure 3). Their presence may represent either the 1756 soldiers' original building effort or CCC (Civilian Conservation Corps) 1930s reconstruction residue.

Stratigraphically, a sharp slope was exposed at the beginning of the brown humus lens 82 feet east of the west curtain wall within the Fort. Whether this slope was a natural terrace dating to the pre-1756 era is uncertain at this time in the investigation.

Additional profiles were obtained of the red gravelly clay fill which was believed to have been deposited in the 1930s by the CCC (Israel 1975a: 30). In matching the interior and exterior Fort elevations, this author realized a one foot error in the Fox & Associates, Inc., 1973 topographic map. Noting the depths of the 1975 installed gray plastic pipe beneath the interior and exterior sides of the

west curtain wall (Israel 1975b: 2), the interior ground grade of the Fort was found to be 474 feet in elevation and the exterior ground grade abutting the west curtain wall to be 471.4 feet and not 470 feet in elevation as indicated by Fox & Associates topographic map (see Figures 3 and 4 for matching corrected computations).

The destruction of the 10 foot long brick feature west of the east barrack should be avoided in future historic site reconstruction projects.

A number of 20th Century intrusive features were encountered; but it is the author's opinion that the 8 inch wide trench provided little conclusive proof regarding the soil stratigraphy critical to identification of the 18th Century Fort construction. Important stratigraphy made faint by time could have gone unnoticed in these shallow and narrow construction trenches. Archeological observation was further hampered by the thin film of soil deposited by the Ditch Witch on the sides of the trenches.

Further investigation of Strandberg's (1974) aerial photo finds and Israel (1975b: 11) photographs is urged, in order, to study the grass color anomalies found along the curtain and bastion walls exterior faces.

The 30 to 36 inch deep construction trenches revealed no recognized evidence of 18th Century Fort construction nor in the conjectured ditch area west of the west curtain wall or of a thick earthen parapet (retaining wall

and logs) east of the standing stone curtain. However, larger exploratory trenches utilizing archeological field techniques are recommended to verify the above tentative conclusions drawn from the electrical line construction trenches. A thorough and confirming archeological investigation of typical sections that would reveal ditches or other features associated with the curtain walls at Fort Frederick could be accomplished within a week's time.

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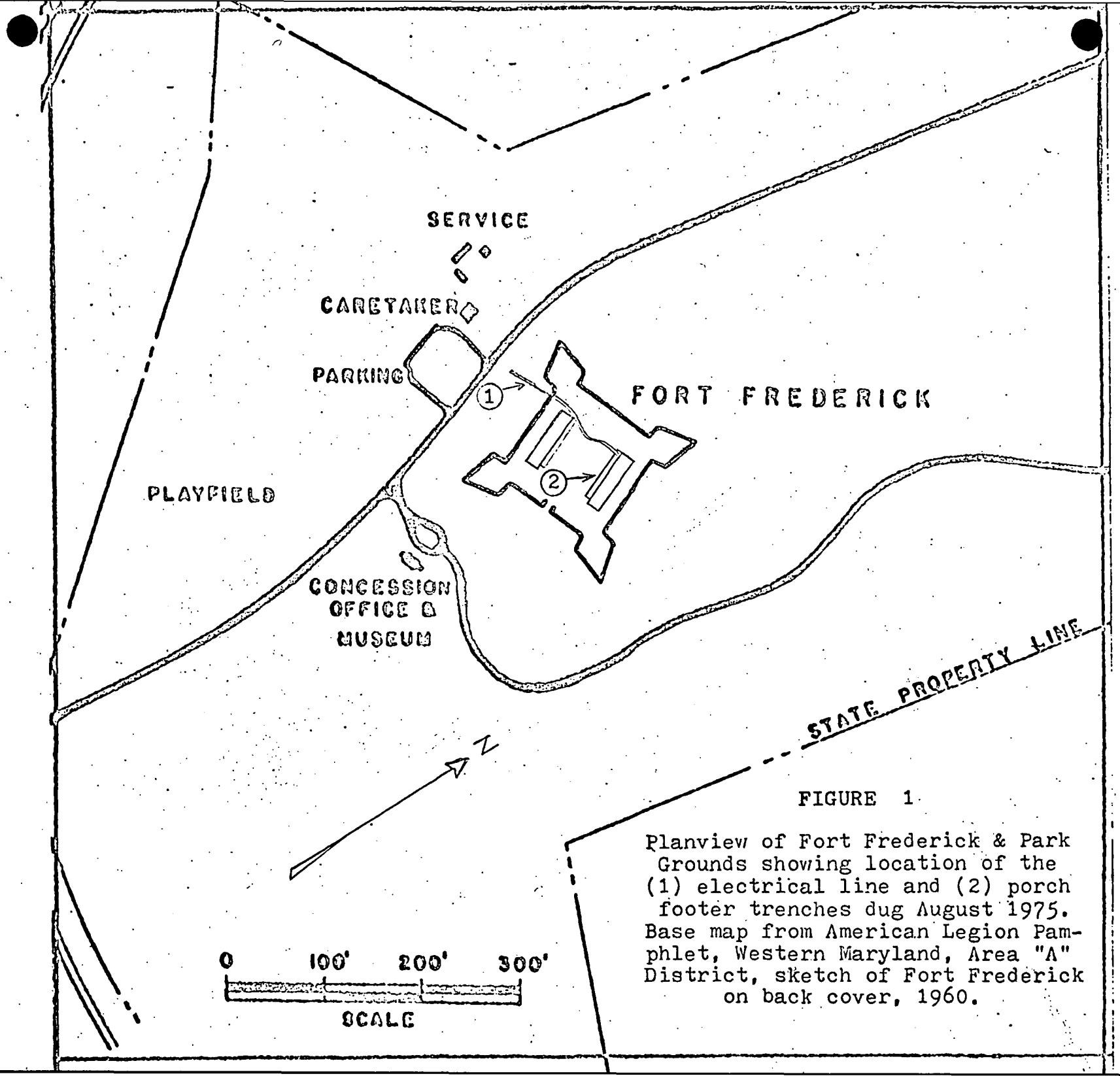
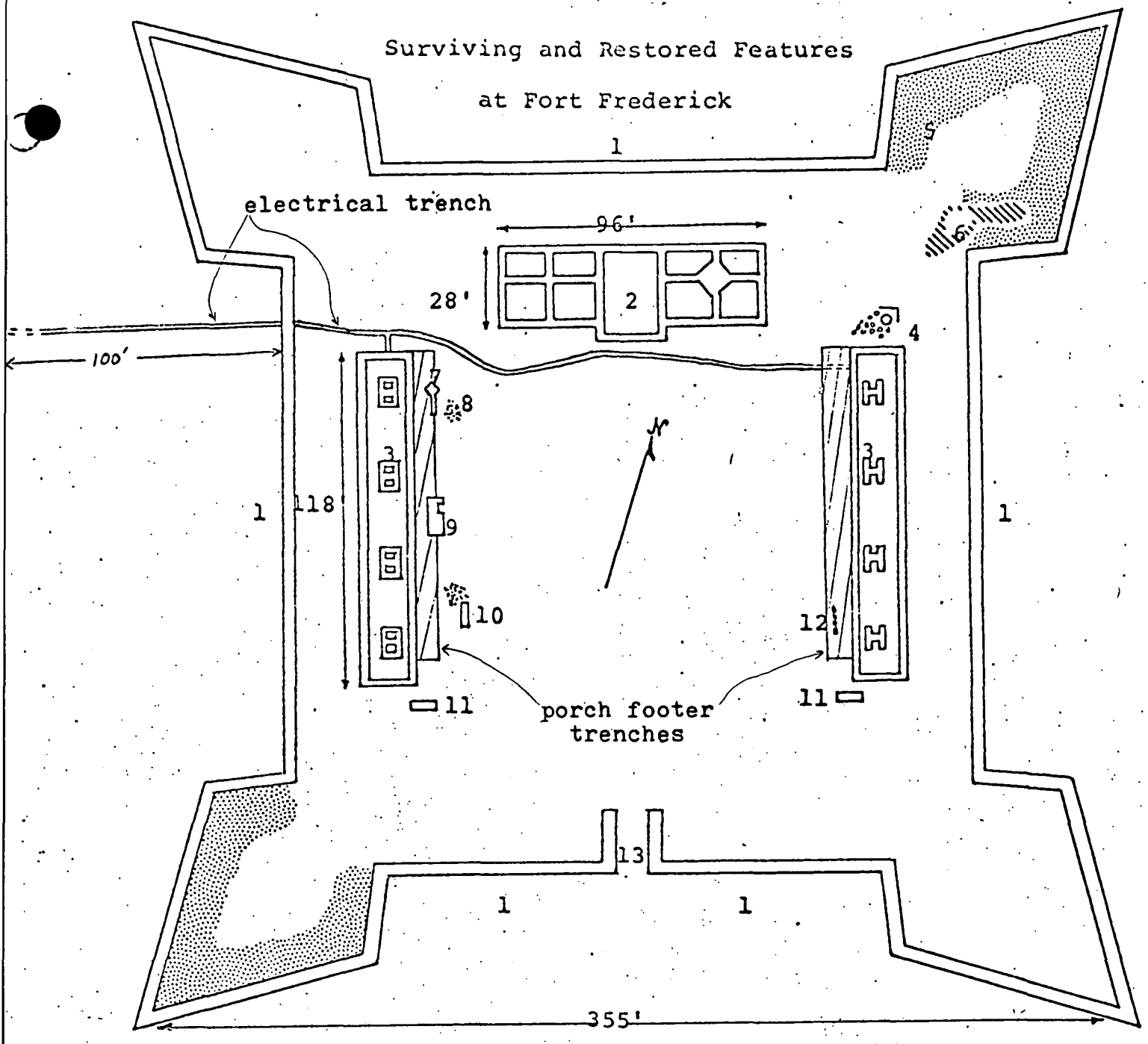


FIGURE 1

Planview of Fort Frederick & Park Grounds showing location of the (1) electrical line and (2) porch footer trenches dug August 1975. Base map from American Legion Pamphlet, Western Maryland, Area "A" District, sketch of Fort Frederick on back cover, 1960.



Based on the 1934 Archeological Plan of the Fort

1. Scarp Wall, stone, partially restored.
2. Foundations, officers' quarters and storeroom, capped to grade.
3. Foundations, enlisted barracks, capped.
4. Well, stone, restored.
5. Thin layer decayed wood.
6. Shale over decayedwood
7. Foundation for butcher's block, brick, restored.
8. Debris brick.
9. Foundation for fireplace, inferred to be a bake oven, stone, capped.
10. Single course brick paving a loose stone.
11. Footings, ston capped.
12. Gutter, brick
13. Gateway.

FIGURE 2

Planview sketch of Fort Frederick showing the Restored 18th Century Features and electrical line and porch footer trenches dug August 1975.
Base map from Kimmel 1973: 44.

FIGURE 3

FORT FREDERICK

East-West Cross Section Sketch of the exterior electrical line trench (west of curtain wall) showing concentrations of loose granite, occupational, and 1930s CCC (Civilian Conservation Corps) intrusive trenches.
North Profile Sketch of 8 inch wide trench drawn August 12, 1975, site 18WA20

Topographical Data taken from Kish 1974, Restoration and Development Drawings

1" = 5' Scale

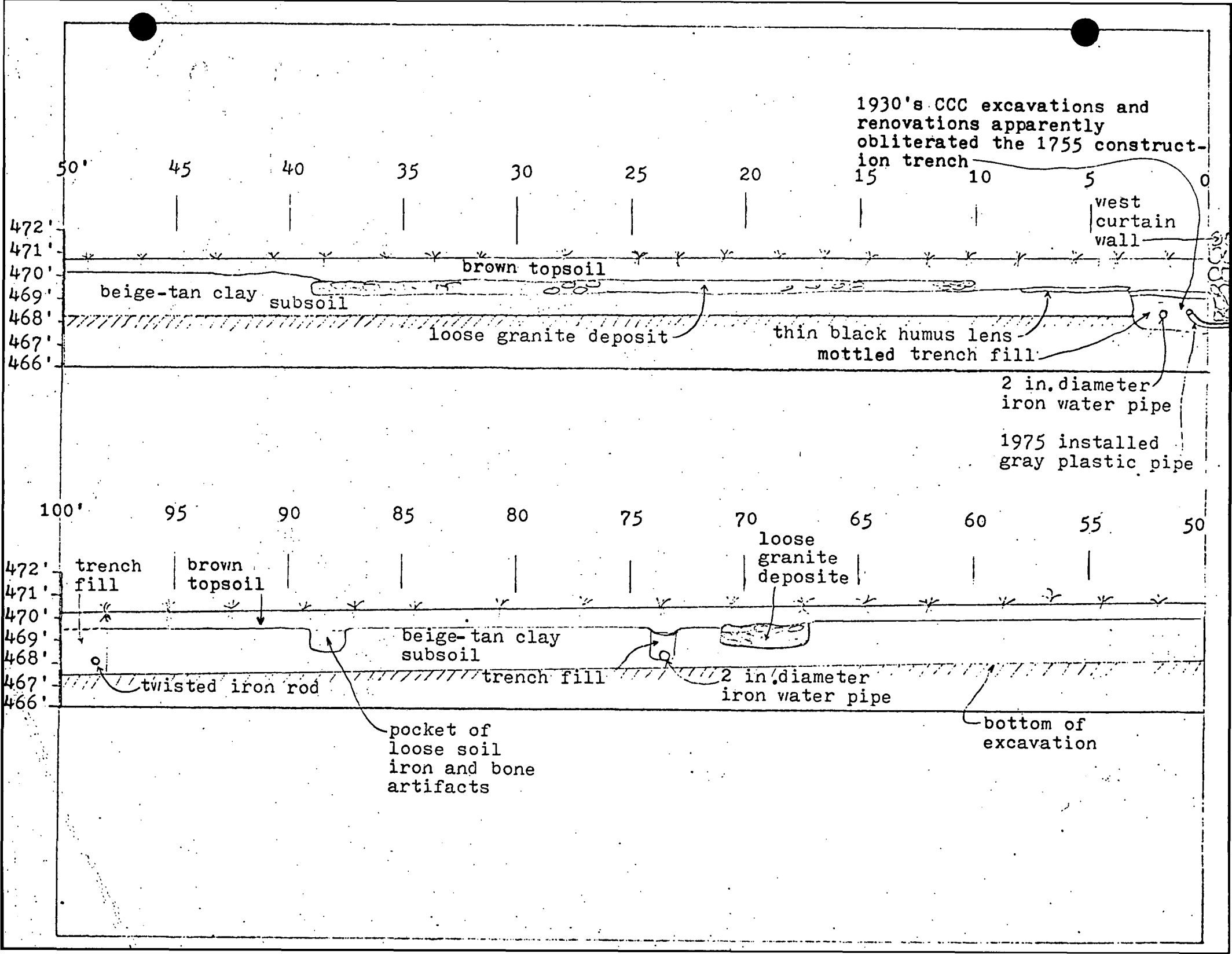

1930's CCC excavations and renovations apparently obliterated the 1755 construction trench
50'
45
40
35
30
25
20
15
10
5
0
west curtain wall
472'
471'
470'
469'
468'
467'
466'
brown topsoil
beige-tan clay subsoil
loose granite deposit
thin black humus lens
mottled trench fill
2 in. diameter iron water pipe
1975 installed gray plastic pipe
100'
95
90
85
80
75
70
65
60
55
50
loose granite deposite
trench fill
brown topsoil
beige-tan clay subsoil
trench fill
twisted iron rod
2 in. diameter iron water pipe
pocket of loose soil iron and bone artifacts
bottom of excavation

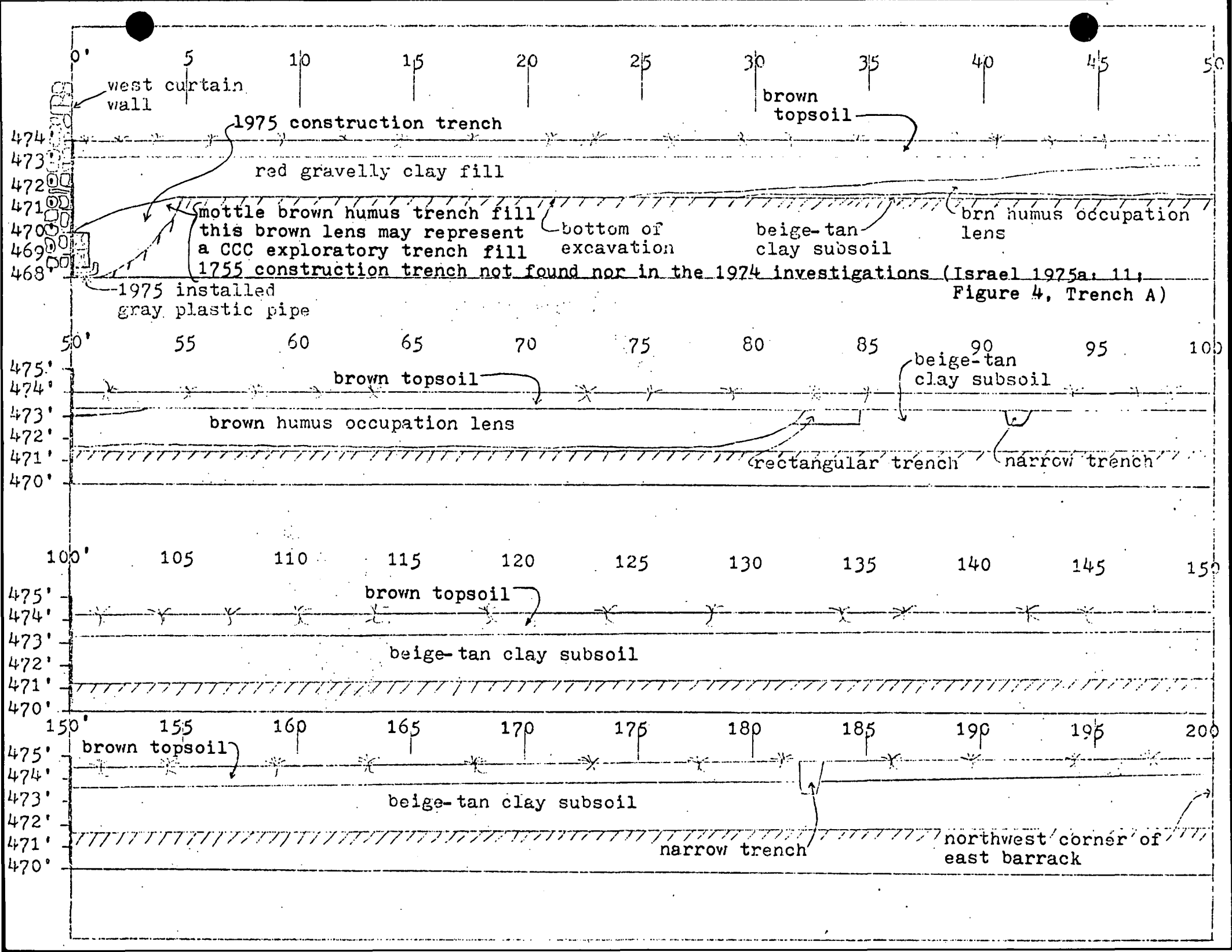
FIGURE 4

FORT FREDERICK

East-West Cross Section Sketch of the interior electrical line trench (west curtain wall to the east barrack) showing occupational, 1930s CCC red clay fill stratigraphy, and 20th Century intrusive archeological trenches.
North Profile Sketch of 8 inch wide trench drawn August 12, 1975, site 18WA20

Topographical Data taken from Kish 1974, Restoration and Development Drawings

1" = 5' Scale


0' 5 10 15 20 25 30 35 40 45 50
west curtain wall
1975 construction trench
brown topsoil
474'
473'
472'
471'
470'
469'
468'
red gravelly clay fill
mottle brown humus trench fill
this brown lens may represent
a CCC exploratory trench fill
1755 construction trench not found nor in the 1974 investigations (Israel 1975a: 11;
Figure 4, Trench A)
bottom of excavation
beige-tan clay subsoil
brn humus occupation lens
1975 installed gray plastic pipe
50' 55 60 65 70 75 80 85 90 95 100
475'
474'
473'
472'
471'
470'
brown topsoil
beige-tan clay subsoil
brown humus occupation lens
rectangular trench
narrow trench
100' 105 110 115 120 125 130 135 140 145 150
brown topsoil
beige-tan clay subsoil
150' 155 160 165 170 175 180 185 190 195 200
brown topsoil
beige-tan clay subsoil
narrow trench
northwest corner of east barrack